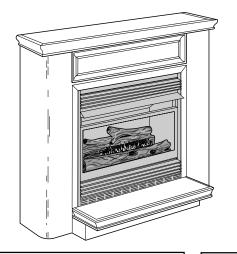
# **VANGUARD**®

# VENT-FREE PROPANE/LP GAS COMPACT CLASSIC HEARTH® FIREPLACE

#### OWNER'S OPERATION AND INSTALLATION MANUAL

VMH10TPA 10,000 Btu/Hr with Thermostat





Shown with Optional Cabinet Mantel/Hearth Base Accessory

WARNING: If the information in this manual is not followed exactly, a fire or explosion may result causing property damage, personal injury, or loss of life.

- Do not store or use gasoline or other flammable vapors and liquids in the vicinity of this or any other appliance.
- WHAT TO DO IF YOU SMELL GAS
- Do not try to light any appliance.
- Do not touch any electrical switch; do not use any phone in your building.
- Immediately call your gas supplier from a neighbor's phone. Follow the gas supplier's instructions.
- If you cannot reach your gas supplier, call the fire department.
- Installation and service must be performed by a qualified installer, service agency, or the gas supplier.

WARNING: Improper installation, adjustment, alteration, service, or maintenance can cause injury or property damage. Refer to this manual for correct installation and operational procedures. For assistance or additional information consult a qualified installer, service agency, or the gas supplier.

WARNING: This is an unvented gas-fired heater. It uses air (oxygen) from the room in which it is installed. Provisions for adequate combustion and ventilation air must be provided. Refer to *Air for Combustion and Ventilation* section on page 5 of this manual.

This appliance may be installed in an aftermarket\*, permanently located, manufactured (mobile) home, where not prohibited by local codes.

This appliance is only for use with the type of gas indicated on the rating plate. This appliance is not convertible for use with other gases.

\*Aftermarket: Completion of sale, not for purpose of resale, from the manufacturer

#### VENT-FREE PROPANE/LP GAS COMPACT FIREPLACE

## SAFETY INFORMATION



IMPORTANT: Read this owner's manual carefully and completely before trying to assemble, operate, or service this fireplace. Improper use of this fireplace can cause serious injury or death from burns, fire, explosion, electrical shock, and carbon monoxide poisoning.

## A DANGER: Carbon monoxide poisoning may lead to death!

Carbon Monoxide Poisoning: Early signs of carbon monoxide poisoning resemble the flu, with headaches, dizziness, or nausea. If you have these signs, the fireplace may not be working properly. Get fresh air at once! Have fireplace serviced. Some people are more affected by carbon monoxide than others. These include pregnant women, people with heart or lung disease or anemia, those under the influence of alcohol, and those at high altitudes.

**Propane/LP Gas:** Propane/LP gas is odorless. An odor-making agent is added to propane/LP gas. The odor helps you detect a propane/LP gas leak. However, the odor added to propane/LP gas can fade. Propane/LP gas may be present even though no odor exists.

Make certain you read and understand all Warnings. Keep this manual for reference. It is your guide to safe and proper operation of this fireplace.

## WARNING: Any change to this fireplace or its controls can be dangerous.

- This appliance is only for use with the type of gas indicated on the rating plate. This appliance is not convertible for use with other gases.
- Do not place propane/LP supply tank(s) inside any structure. Locate propane/ LP supply tank(s) outdoors.

- 3. If you smell gas
  - · shut off gas supply
  - do not try to light any appliance
  - do not touch any electrical switch; do not use any phone in your building
  - immediately call your gas supplier from a neighbor's phone. Follow the gas supplier's instructions
  - if you cannot reach your gas supplier, call the fire department
- 4. This fireplace shall not be installed in a bathroom.
- 5. Never install the fireplace
  - in a recreational vehicle.
  - where curtains, furniture, clothing, or other flammable objects are less than 36 inches from the front, top, or sides of the fireplace.
  - as a fireplace insert.
  - in high traffic areas.
  - in windy or drafty areas.
- 6. Do not use this fireplace as a woodburning fireplace. Use only the logs provided with the fireplace.
- 7. Do not add extra logs or ornaments such as pine cones, vermiculite, or rock wool. Using these added items can cause sooting. Do not add lava rock around base. Rock and debris could fall into the control area of fireplace.
- 8. You must operate this fireplace with the fireplace screen in place. Make sure fireplace screen is in place before running fireplace.
- 9. This fireplace is designed to be smokeless. If logs ever appear to smoke, turn off fireplace and call a qualified service person. *Note:* During initial operation, slight smoking could occur due to log curing and fireplace burning manufacturing residues.
- 10. To prevent the creation of soot, follow the instructions in *Cleaning and Maintenance*, page 23.
- 11. Do not allow fans to blow directly into the fireplace. Avoid any drafts that alter burner flame patterns. Ceiling fans can create drafts that alter burner flame patterns. Altered burner patterns can cause sooting.

- 12. Before using furniture polish, wax, carpet cleaner, or similar products, turn heater off. If heated, the vapors from these products may create a white powder residue within burner box or on adjacent walls or furniture.
- 13. This fireplace needs fresh air ventilation to run properly. This fireplace has an oxygen depletion sensor (ODS) pilot light safety system. The ODS shuts down the fireplace if not enough fresh air is available. See *Air for Combustion and Ventilation*, pages 5 through 7. If fireplace keeps shutting off, see *Trouble-shooting*, pages 20 through 22.
- 14. Do not run fireplace
  - where flammable liquids or vapors are used or stored.
  - under dusty conditions.
- 15. Do not use this fireplace to cook food or burn paper or other objects.
- 16. Never place any objects in the fireplace or on logs.
- 17. Fireplace front and screen becomes very hot when running fireplace. Keep children and adults away from hot surfaces to avoid burns or clothing ignition. Fireplace will remain hot for a time after shutdown. Allow surfaces to cool before touching.
- 18. Carefully supervise young children when they are in same room with fireplace.
- 19. Do not use fireplace if any part has been under water. Immediately call a qualified service technician to inspect the room fireplace and to replace any part of the control system and any gas control which has been under water.
- 20. Turn off and unplug fireplace and let cool before servicing. Only a qualified service person should service and repair fireplace.
- 21. Operating fireplace above elevations of 4,500 feet could cause pilot outage.
- 22. Do not use a blower insert, heat exchanger insert, or other accessory not approved for use with this fireplace.
- 23. Do not operate fireplace if any log is broken. Do not operate fireplace if a log is chipped (dime-sized or larger).
- 24. To prevent performance problems, do not use propane/LP fuel tank of less than 100 lbs. capacity.

## PRODUCT IDENTIFICATION

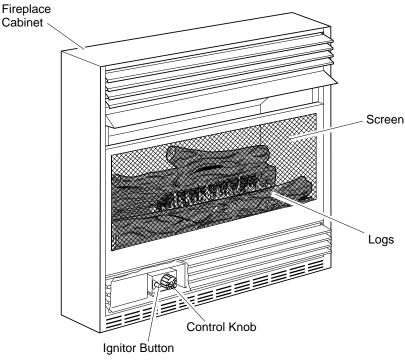


Figure 1 - Vent-Free Propane/LP Gas Compact Fireplace

#### **LOCAL CODES**

Install and use fireplace with care. Follow all local codes. In the absence of local codes, use the latest edition of *The National Fuel Gas Code ANS Z223.1*, also known as NFPA 54\*.

\*Available from:

American National Standards Institute, Inc. 1430 Broadway New York, NY 10018

National Fire Protection Association, Inc. Batterymarch Park Quincy, MA 02269

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UNPACKING

- 1. Remove log box and fireplace from carton. The hood is not attached.
- 2. Remove all protective packaging applied to fireplace for shipment.
- 3. Make sure your fireplace includes one hardware packet.
- Check fireplace for any shipping damage.
   If fireplace is damaged, promptly inform dealer where you bought fireplace.

## PRODUCT FEATURES

#### **SAFETY PILOT**

This fireplace has a pilot with an Oxygen Depletion Sensor Shutoff System (ODS). The ODS/pilot is a required feature for vent-free room fireplaces. The ODS/pilot shuts off the fireplace if there is not enough fresh air.

#### PIEZO IGNITION SYSTEM

This fireplace has a piezo ignitor. This system requires no matches, batteries, or other sources to light fireplace.

## THERMOSTATIC HEAT CONTROL

This fireplace has a thermostat sensing bulb and a control valve. The thermostat will automatically modulate the heat output to maintain a consistent room temperature. This results in greater fireplace comfort. This can also result in lower gas bills.

### **VENT-FREE PROPANE/LP GAS COMPACT FIREPLACE**

#### **ASSEMBLY**

WARNING: Always have branch support and screen in place before operating fireplace. This prevents excessive temperatures on fireplace surfaces.

#### ASSEMBLING FIREPLACE

Tools Required:

- · Phillips screwdriver
- 5/16" hex wrench
- · slotted screwdriver

#### **Installing Log**

- Remove back log, branch, and hood from log box. Discard protective packaging.
- 2. Remove two shipping screws above screen (see Figure 2).
- 3. Lift screen up and pull out to remove.
- 4. An optional blower is available. See *Accessories*, page 27. Install optional blower now. Follow installation instructions provided with blower.
- 5. Gently place back log on burner support (see Figure 2). The log should fit flat against top of burner support. Place two #10 one-inch-long screws through burner support into the log and tighten.
- Place branch on branch support (see Figure 2). Do not allow branch to contact flame. If flame contacts branch, soot will be created.
- Reattach screen by placing the notches in the screen frame over the shoulder screws and pushing down.

WARNING: Failure to position the parts in accordance with these diagrams or failure to use only parts specifically approved with this fireplace may result in property damage or personal injury.

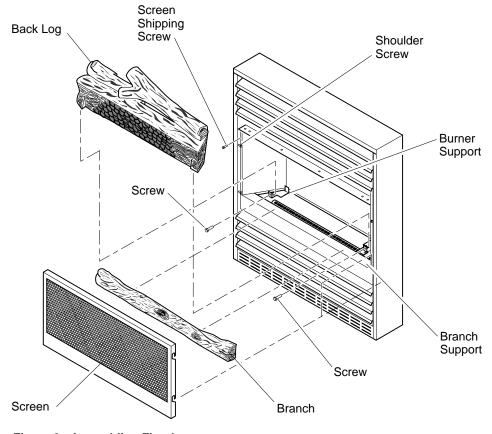


Figure 2 - Assembling Fireplace

#### **Assembling Hood**

- 1. Locate four #10-3/8" black phillips sheet metal screws from the hardware packet.
- 2. Slip top of hood between middle rail and top of firebox wrapper (see Figure 3).
- 3. Attach four #10-3/8" hood screws as shown in Figure 3.

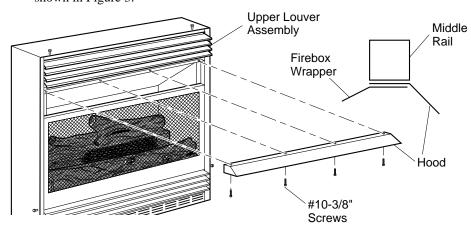


Figure 3 - Assembling Hood

# AIR FOR COMBUSTION AND VENTILATION

WARNING: This heater shall not be installed in a confined space or unusually tight construction unless provisions are provided for adequate combustion and ventilation air. Read the following instructions to insure proper fresh air for this and other fuel-burning appliances in your home.

Today's homes are built more energy efficient than ever. New materials, increased insulation, and new construction methods help reduce heat loss in homes. Home owners weather strip and caulk around windows and doors to keep the cold air out and the warm air in. During heating months, home owners want their homes as airtight as possible.

While it is good to make your home energy efficient, your home needs to breathe. Fresh air must enter your home. All fuel-burning appliances need fresh air for proper combustion and ventilation.

Exhaust fans, fireplaces, clothes dryers, and fuel burning appliances draw air from the house to operate. You must provide adequate fresh air for these appliances. This will insure proper venting of vented fuel-burning appliances.

### PROVIDING ADEQUATE VENTILATION

The following are excerpts from *National Fuel Gas Code*. NFPA 54/ANS Z223.1, Section 5.3, Air for Combustion and Ventilation.

All spaces in homes fall into one of the three following ventilation classifications:

- 1. Unusually Tight Construction
- 2. Unconfined Space
- 3. Confined Space

The information on pages 5 through 7 will help you classify your space and provide adequate ventilation.

#### **Unusually Tight Construction**

The air that leaks around doors and windows may provide enough fresh air for combustion and ventilation. However, in buildings of unusually tight construction, you must provide additional fresh air.

### Unusually tight construction is defined as construction where:

- a. walls and ceilings exposed to the outside atmosphere have a continuous water vapor retarder with a rating of one perm (6 x 10<sup>-11</sup> kg per pa-sec-m²) or less with openings gasketed or sealed <u>and</u>
- weather stripping has been added on openable windows and doors and
- c. caulking or sealants are applied to areas such as joints around window and door frames, between sole plates and floors, between wall-ceiling joints, between wall panels, at penetrations for plumbing, electrical, and gas lines, and at other openings.

If your home meets all of the three criteria above, you must provide additional fresh air. See *Ventilation Air From Outdoors*, page 7.

If your home does not meet all of the three criteria above, proceed to *Determining Fresh-Air Flow For Fire-place Location*, page 6.

#### **Confined and Unconfined Space**

The National Fuel Gas Code (ANS Z223.1, 1992 Section 5.3) defines a confined space as a space whose volume is less than 50 cubic feet per 1,000 Btu per hour (4.8 m³ per kw) of the aggregate input rating of all appliances installed in that space and an unconfining space as a space whose volume is not less than 50 cubic feet per 1,000 Btu per hour (4.8 m³ per kw) of the aggregate input rating of all appliances installed in that space. Rooms communicating directly with the space in which the appliances are installed\*, through openings not furnished with doors, are considered a part of the unconfined space.

This heater shall not be installed in a confined space or unusually tight construction unless provisions are provided for adequate combustion and ventilation air.

\* Adjoining rooms are communicating only if there are doorless passageways or ventilation grills between them.

Continued

## VANGUARD VMH10TPA VENT-FREE PROPANE/LP GAS COMPACT FIREPLACE

#### **AIR FOR** COMBUSTION AND VENTILATION

Continued

#### DETERMINING FRESH-AIR FLOW FOR FIREPLACE LOCATION

#### **Determining if You Have a Confined or Unconfined Space**

Use this worksheet to determine if you have a confined or unconfined space.

**Space:** Includes the room in which you will install fireplace plus any adjoining rooms with doorless passageways or ventilation grills

1.	Determine the volume of the space (length x width x height).						
	Length x Width x Height =	cu. 1	ft. (volume o	of space)			
	Example: Space size 16 ft. (le	ength) x 14 ft. (width) x	8 ft. (ceilin	g height) = 1792 cu.	ft. (	volume o	f space)
	If additional ventilation to adjoining room is supplied with grills or openings, add the volume of these rooms to the total volume of the space.						
2.	Multiply the space volume by	1000 Btu/Hr per 50 cub	oic feet to de	etermine the maximum	m B	tu/Hr the	space can support.
	(vo.	lume of space) x (1000	Btu/Hr ÷ 50	cu. ft.) = (Maximun	n Bt	u/Hr the	space can support)
	Example: 1792 cu. ft. (space support.	volume) x (1000 Btu/F	Hr ÷ 50 cu. 1	ft.) = 35,840 Btu/Hr.	Thi	s is the n	naximum Btu/Hr the space can
3.	Add the Btu/Hr of all fuel burn	ing appliances in the sp	pace.				
	Vent-free fireplace		Btu/Hr				
	Gas water heater*		Btu/Hr	Example:			
	Gas furnace		Btu/Hr	Gas water heater		30,000	Btu/Hr
	Vented gas heater		Btu/Hr	Vent-free fireplace	<u>+</u>		Btu/Hr
	Gas fireplace logs		Btu/Hr	Total	=	40,000	Btu/Hr
	Other gas appliances* +		Btu/Hr				
	Total =		Btu/Hr				
	* Do not include direct-vent ga	as appliances. Direct-ve	ent draws co	mbustion air from the	e ou	tdoors an	d vents to the outdoors.
4.	Compare the maximum Btu/Hr the space can support with the actual amount of Btu/Hr used.						
	Btu/Hr (maximum the space can support)						
	Btu/Hr (actual amount of Btu/Hr used)						
	Example: 35,840 Btu/Hr (maximum the space can support)						
	40,000 Btu/Hr (actual amount of Btu/Hr used)						

The space in the above example is a confined space because the actual Btu/Hr used is more than the maximum Btu/Hr the space can support. You must provide additional fresh air. Your options are as follows:

- A. Rework worksheet, adding the space of an adjoining room. If the extra space provides an unconfined space, remove door to adjoining room or add ventilation grills between rooms. See Ventilation Air From Inside Building, page 7.
- B. Vent room directly to the outdoors. See *Ventilation Air From Outdoors*, page 7.
- C. Install a lower Btu/Hr fireplace, if lower Btu/Hr size makes room unconfined.

If the actual Btu/Hr used is less than the maximum Btu/Hr the space can support, the space is an unconfined space. You will need no additional fresh air ventilation.

MARNING: If the area in which the heater may be operated is smaller than that defined as an unconfined space or if the building is of unusually tight construction, provide adequate combustion and ventilation air by one of the methods described in the National Fuel Gas Code, ANS Z223.1, 1992, Section 5.3 or applicable local codes.

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# AIR FOR COMBUSTION AND VENTILATION

Continued

#### **VENTILATION AIR**

### Ventilation Air From Inside Building

This fresh air would come from an adjoining unconfined space. When ventilating to an adjoining unconfined space, you must provide two permanent openings: one within 12" of the ceiling and one within 12" of the floor on the wall connecting the two spaces (see options 1 and 2, Figure 4). You can also remove door into adjoining room (see option 3, Figure 4). Follow the *National Fuel Gas Code NFPA 54/ANS Z223.1, Section 5.3, Air for Combustion and Ventilation* for required size of ventilation grills or ducts.

A WARNING: Rework worksheet, adding the space of the adjoining unconfined space. The combined spaces must have enough fresh air to supply all appliances in both spaces.

#### **Ventilation Air From Outdoors**

Provide extra fresh air by using ventilation grills or ducts. You must provide two permanent openings: one within 12" of the ceiling and one within 12" of the floor. Connect these items directly to the outdoors or spaces open to the outdoors. These spaces include attics and crawl spaces. Follow the *National Fuel Gas Code NFPA 54/ANS Z223.1, Section 5.3, Airfor Combustion and Ventilation* for required size of ventilation grills or ducts.

*IMPORTANT:* Do not provide openings for inlet or outlet air into attic if attic has a thermostat-controlled power vent. Heated air entering the attic will activate the power vent.

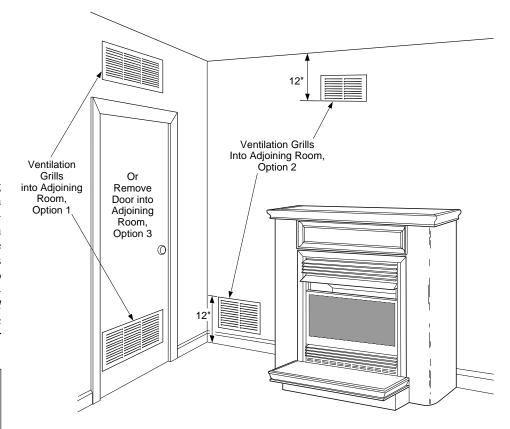


Figure 4 - Ventilation Air from Inside Building Shown with Optional Mantel

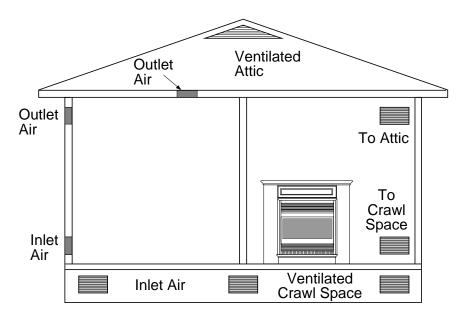


Figure 5 - Ventilation Air from Outdoors Shown with Optional Mantel

#### VENT-FREE PROPANE/LP GAS COMPACT FIREPLACE

#### INSTALLATION

NOTICE: This heater is intended for use as supplemental heat. Use this heater along with your primary heating system. Do not install this heater as your primary heat source. If you have a central heating system, you may run system's circulating blower while using heater. This will help circulate the heat throughout the house. In the event of a power outage, you can use this heater as your primary heat source.

WARNING: A qualified service person must install fireplace. Follow all local codes.

Note: Your Vanguard fireplace is designed to be used in zero clearance installations. Wall or framing material can be placed directly against any exterior surface on the rear, sides, or top of your fireplace, except where standoff spacers are integrally attached. If standoff spacers are attached to your fireplace, these spacers can be placed directly against wall or framing materials.

Use the dimensions shown for rough openings to create the easiest installation (see *Built-In Fireplace Installation*, page 9).

#### **CHECK GAS TYPE**

Use only propane/LP gas. If your gas supply is not propane/LP, do not install fireplace. Call the dealer where you bought your fireplace for the proper type fireplace.

#### **INSTALLATION ITEMS**

Before installing fireplace, make sure you have the items listed below.

- external regulator (supplied by installer)
- piping (check local codes)
- sealant (resistant to propane/LP gas)
- manual shutoff valve \*
- · test gauge connection\*
- · ground joint union
- · sediment trap
- tee joint
- pipe wrench

\* An A.G.A. design-certified manual shutoff valve with 1/8" NPT tap is an acceptable alternative to test gauge connection. Pur-

chase the optional A.G.A. design-certified manual shutoff valve from your dealer. See *Accessories*, page 27.

*Note*: If desired, purchase a four-sided brass trim kit for built-in installations. See *Accessories*, page 27.

#### LOCATING FIREPLACE

WARNING: Maintain the minimum clearances shown in Figure 6 and Figure 7, page 9. If you can, provide greater clearances from floor, ceiling, and joining wall.

NOTICE: If you install the fireplace in a bedroom, some building codes require that the fireplace/mantel system be secured to (or within) a wall. You can position fireplace in an optional cabinet or corner mantel. You can also recess fireplace into the wall.

If your fireplace is to be used with an optional mantel, the installation instructions included with your mantel shows an AGA approved method of attaching the fireplace/mantel system to a wall. *IMPORTANT*: Only use optional cabinet or corner mantels specified in this manual. Purchase the optional mantel from your dealer (see *Accessories*, page 27).

If your fireplace is to be recessed into the wall, see *Built-In Fireplace Installation* on page 9 to secure your fireplace into the wall.

## **MARNING:** Never install the fireplace

- in a bathroom
- · in a recreational vehicle
- where curtains, furniture, clothing, or other flammable objects are less than 36 inches from the front, top, or sides of the fireplace

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- · as a fireplace insert
- · in high traffic areas
- · in windy or drafty areas

CAUTION: This heater creates warm air currents. These currents move heat to wall surfaces next to heater. Installing heater next to vinyl or cloth wall coverings or operating heater where impurities (such as tobacco smoke, aromatic candles, cleaning fluids, oil or kerosene lamps, etc.) in the air exist, may discolor walls.

A CAUTION: If you install the fireplace in a home garage

- fireplace pilot and burner must be at least 18 inches above floor.
- locate fireplace where moving vehicle will not hit it.

For convenience and efficiency, install fireplace

- where there is easy access for operation, inspection, and service
- in coldest part of room

An optional blower kit is available from your dealer. See *Accessories*, page 27. If planning to use blower, follow instructions provided with blower for power source.

*IMPORTANT:* Vent-free fireplaces add moisture to the air. Although this is beneficial, installing fireplace in rooms without enough ventilation air may cause mildew to form from too much moisture. See *Air for Combustion and Ventilation*, pages 5 through 7.

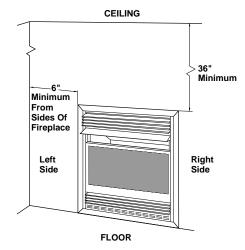


Figure 6 - Mounting Clearances As Viewed From Front of Fireplace Shown Built In The Wall

### INSTALLATION

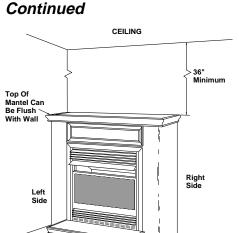


Figure 7-Mounting Clearances As Viewed From Front of Fireplace Shown with Optional Mantel

## BUILT-IN FIREPLACE INSTALLATION

Built-in installation of this fireplace involves installing fireplace into a framed-in enclosure. This makes the front of fireplace flush with wall. An optional brass trim kit accessory is available (see Accessories, page 27). Brass trim will extend past sides of fireplace approximately 1/2 inch. This will cover the rough edges of the wall opening. If installing a built-in mantel above the fireplace, but you must follow the clearances shown in Figure 11, page 10. Follow the instructions below to install the fireplace in this manner. *Note:* Your Vanguard fireplace is designed to be used in zero clearance installations. Wall or framing material can be placed directly against any exterior surface on the rear, sides, or top of your fireplace.

	Actual	Framing	
Height	26"	26 <sup>7</sup> /8"	
Front Width	26 3/4"	26 <sup>7</sup> /8"	
Depth	9 1/2"	10 <sup>1</sup> / <sub>2</sub> "	
Bottom	3/4"	3/4"	

 Frame in rough opening. Use dimensions shown in Figure 8 for the rough opening. If installing in a corner, use dimensions shown in Figure 9 for the rough opening. The height is 26 <sup>7</sup>/s" which is the same as the wall opening above.

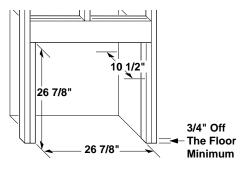


Figure 8 - Rough Opening for Installing in Wall

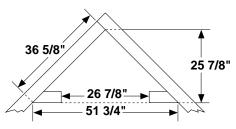


Figure 9 - Rough Opening for Installing in Corner

- 2. An optional blower accessory is available (see *Accessories*, page 27). There are three options for connecting blower to electrical source.
  - **Option one:** Install fireplace near an electrical outlet. See blower instructions for power cord length.

**Option two:** Have a licensed electrician install a properly grounded, three-prong 120-volt electrical outlet at fire-place location. Locate outlet inside the framed enclosure. Blower power cord will plug into this outlet.

**Option three:** Have a licensed electrician connect blower to electrical source at junction box inside fireplace. If using option one, have electrical out-

lf using option one, have electrical outlet installed at this time. If using option two, do not connect blower to electrical source at junction box until step 7.

Install gas piping to fireplace location.
 This installation includes an approved flexible gas line (if allowed by local codes) after the manual shutoff valve.
 The flexible gas line must be the last item installed on the gas piping.

- 4. If you have not assembled firebox, follow instructions on page 4.
- Carefully set fireplace in front of rough opening with back of fireplace inside wall opening.
- 6. Attach flexible gas line to fireplace gas regulator. See *Connecting Fireplace to Gas Supply*, page 15.
- 7. If the optional blower has been installed connect blower to electrical source.

**Options one and two:** Route blower electrical cord through side or rear access door of fireplace. Plug electrical cord into electrical outlet.

**Option three:** Have a licensed electrician connect blower to electrical source at junction box inside fireplace.

- 8. Bend four nailing flanges on outer casing with pliers (see Figure 10).
- 9. Attach fireplace to wall studs using nails or wood screws through holes in nailing flange.
- 10. Check all gas connections for leaks. See *Checking Gas Connections*, page 16.
- 11. If using optional brass trim kit, install the trim after final finishing and/or painting of wall. See instructions included with brass trim accessory for attaching brass trim.

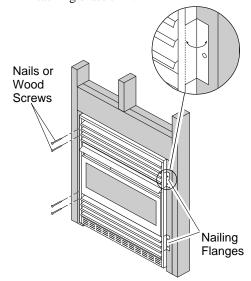


Figure 10 - Attaching Fireplace to Wall Studs

Continued

#### VENT-FREE PROPANE/LP GAS COMPACT FIREPLACE

#### INSTALLATION

#### Continued

#### **Mantel Clearances for Built-In** Installation

If placing mantel above built-in fireplace, you must meet minimum clearance between mantel shelf and top of fireplace opening.

If your installation does not meet the below minimum clearances, you must:

- raise the mantel to an acceptable height,
- OR · remove the mantel.

Mantel Shelf 10' Note: 8" All vertical measurements are from top of 2 1/2" fireplace opening to bottom of mantel shelf. All measurements are in inches. <u></u> ō 19" Side of Firebox

Figure 11 - Minimum Mantel Clearances for Built-In Installation

#### **OPTIONAL MANTEL** INSTALLATION

*Note:* Refer to instructions provided with the mantel for assembly instructions. Refer to instructions below for system installation. Refer to instructions on page 4 for firebox assembly. Blower accessory should be installed if it is being used (see Installing Blower Accessory GA3400T, page 11).

- Unscrew four brass screws that attach top louver to fireplace. Remove louver from fireplace and set aside.
- Place fireplace on wood base.
- Place mantel around fireplace/base assembly.
- 4. Assemble brass trim kit. See Assembling Brass Trim, page 11.
- 5. Firmly snap brass trim kit on shoulder screws. Shoulder screws are located on fireplace cabinet (see Figure 12).
- Align brass trim kit for flush fit around opening.
- 7. Use two 3" wood screws provided and attach fireplace base to wooden base (see Figure 12).

- 8. Place assembly next to wall at installation location.
- Remove brass trim kit and mantel. Be careful not to damage wall or mantel.
- Attach wood base to floor with two 1 3/4" black screws provided (see Figure 13). If the floor is concrete use anchor method (see Attaching Wood Base to Solid Floor, page 14).
- 11. Install gas line. See Connecting To Gas Supply, page 14.
- 12. Check for leaks. See Checking Gas Connections, page 16.
- 13. Place mantel around fireplace. Be careful not to damage wall or mantel.
- 14. Place brass trim kit on the shoulder screws located on the side and top of the fireplace. Firmly snap the brass trim over the shoulder screws on fireplace (see Figure 12).
- 15. Adjust assembly to remove any gaps. Attach remaining two 3" wood screws from hardware pack through openings inside of fireplace sides into the mantel. The openings are located at top behind the area for the brass louvers (see Figure 13).
- 16. Reinstall top brass louvers.

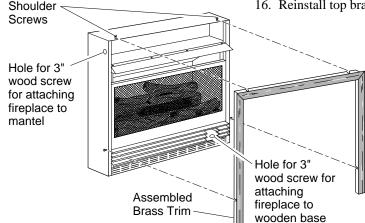


Figure 12 - Attaching Brass Trim to Fireplace

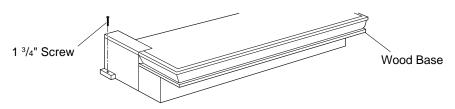


Figure 13 - Attaching Wood Base to Floor

#### INSTALLATION

#### Continued

### Assembling Brass Trim (Brass trim shipped with mantel)

- 1. Remove packaging from three remaining pieces of brass trim.
- Locate two adjusting plates with set screws, and two shims in the hardware packet.
- 3. Align shim under adjusting plate as shown in Figure 14.
- 4. Slide one end of adjusting plate/shim in slot on mitered edge of top brass trim (see Figure 14).
- 5. Slide other end of adjusting plate/shim in slot on mitered edge of side brass trim (see Figure 14).
- 6. While firmly holding edges of brass trim together, tighten both set screws on the adjusting plate with slotted screwdriver.
- 7. Repeat steps 1 through 6 for other corner.
- Set brass assembly aside for later installation.

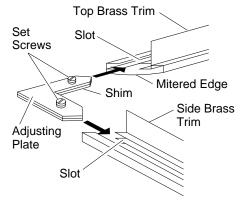


Figure 14 - Assembling Brass Trim

### INSTALLING BLOWER ACCESSORY GA3400T

#### Removing Upper Louver Assembly

To install the blower accessory, you must first remove the upper louver assembly.

- 1. Lift screen off heater.
- 2. Remove 4 screws from louver assembly (see Figure 15). Save these screws.
- 3. Pull louver assembly straight out from the cabinet. Be careful not to scratch the paint. Set louver assembly and screws aside.

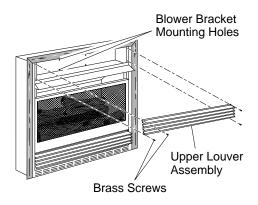


Figure 15 - Removing Upper Louver Assembly

#### **Removing Valve Cover Shield**

- Open bottom louver assembly by swinging the assembly down (see Figure 16).
- Using short Phillips screwdriver, remove the screw under the center of the branch support. Rotate valve cover shield clockwise and slide out. *IMPORTANT:* Do not remove shoulder screw on the left side of valve cover shield. Slide the valve cover shield off of the shoulder screw (see Figure 16).

*Note:* If you do not have a short Phillips screwdriver, the screen, twigs, and branch support must be removed so a longer screwdriver may be used. See *Connecting Fireplace To Gas Supply*, page 15 and follow step 2.

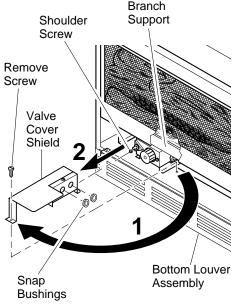


Figure 16 - Removing Valve Cover Shield

#### **Installing Blower Assembly**

*Note:* If you are using a mantel with your heater, use the following instructions. If your heater is built-in, see *For Built-In Installation* on page 13.

- Install snap bushings found in hardware kit into both holes in rear of valve cover shield.
- Make sure the wire harness is firmly connected to the terminals on the blower bracket assembly.
- 3. Note the wire locations on back of AUTO/OFF/ON switch. The terminals on back of switch are numbered 1, 2, and 3. Carefully remove red wire from terminal 1 and blue wire from terminal 3. Black wire can remain on middle terminal 2 (see Figure 17, page 12).

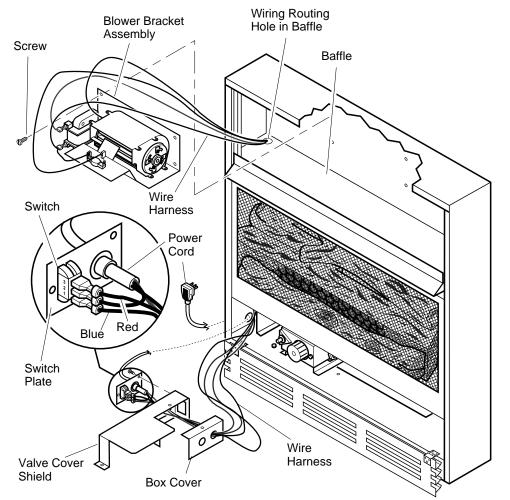
Continued

### **VENT-FREE PROPANE/LP GAS COMPACT FIREPLACE**

#### INSTALLATION

#### Continued

- 4. Carefully disconnect green and white wires at their insulated connectors.
- 5. In top of the heater cabinet, locate the four mounting holes on the outer casing. Align these four holes with those on the blower bracket assembly. Attach blower bracket assembly to the outer casing with 4 #10 screws provided (see Figure 17).
- 6. Route the wire harness through the hole in left side of baffle. Pull wire harness through lower opening above where the valve shield was removed. (see Figure 17).
- Insert the 4 wire harness into one of the round holes in the rear of the valve cover shield and through the rectangular hole in the front of shield (see Figure 17).
- 8. Reconnect red wire to switch position 3. Reconnect blue wire to switch position 1. Reconnect green and white wires.
- Install the switch plate on the valve cover shield with 2 #10 screws provided (see Figure 18). Reinstall the valve cover shield. Route power cord out of the cabinet by inserting it through the bushing on the outer casing (see Figure 17). Plug fan kit into 120-Volt grounded power supply and test operation. Note: When switch is in the AUTO position, the fan will start after the heater has run for a few moments. The fan will continue to run for several moments after the heater has been turned off. When switch is in the ON position, the fan will run until turned to OFF. Reinstall upper louver assembly and hood if previously removed, (see Figure 15, page 11). Close lower louver door.



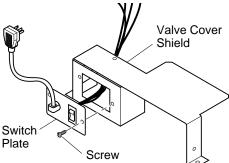


Figure 18 - Installing Switch Plate to Valve Cover Shield

Figure 17 - Installing Blower Bracket Assembly

#### INSTALLATION

#### Continued

#### For Built-In Installation

WARNING: A licensed electrician must connect the wiring harness to electrical supply following all local codes. Electrician must provide a clamp on the box cover to secure the wiring. Wiring should be routed through the bushing in the hole on the outer casing of heater.

Follow instructions *Removing Valve Cover Shield* (page 11), then

- 1. Install a snap bushing found in hardware kit into one of the holes found on rear of valve cover shield. The other hole is for a strain relief clamp (not supplied) to secure incoming electrical supply.
- Follow steps 2 through 6 in *Installing Blower Assembly*, pages 11 and 12.
   Also remove black wire from middle switch terminal 2.
- 3. Remove black plastic strain relief and power cord from switch plate. The power cord supplied will not be used in built-in installations. Pop in the plastic snap bushing found in hardware kit into the hole left by supply cord/strain relief.
- 4. A licensed electrician must follow the wiring diagram to connect incoming electrical supply to fan kit wiring harness (see Figure 20).
- 5. Plug power cord to the outlet receptacle (not provided) as shown in figure 19. Wind the extra cable in power cord and and tie it up with the plastic wire strap (see Figure 19). Set the cable bundle between the burner bracket and outer casing, away from the burner.
- 6. Reinstall valve cover shield.
- 7. Test to make sure the blower is working properly.
- 8. Reinstall upper louver assembly and hood if previously removed, (see Figure 15, page 11). Close lower louver door.

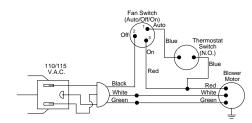


Figure 20 - Wiring Diagram For Blower Accessory Built-In Installation

#### **Extension Cord**

Use extension cord if needed. The cord must have a three-prong, grounding plug and a three-hole receptacle. Make sure cord is in good shape. It must be heavy enough to carry the current needed. An undersized cord will cause a drop in line voltage. This will result in loss of power and overheating. Use a No. 16 AWG cord for lengths less than 50 feet.

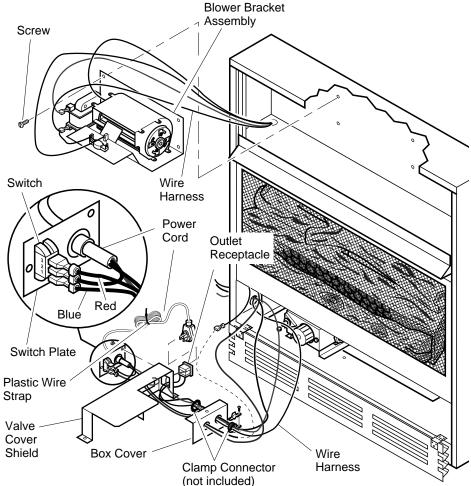


Figure 19 - Installing Blower Bracket Assembly

Continued

#### VENT-FREE PROPANE/LP GAS COMPACT FIREPLACE

#### INSTALLATION

#### Continued

### Attaching Wood Base to Solid Floor

For attaching base to solid floors (concrete or masonry)

*Note:* Floor anchors and mounting screws are in hardware package. The hardware package is provided with fireplace.

- 1. Drill holes at marked locations using 5/16" drill bit. For solid floors (concrete or masonry), drill at least 1" deep.
- 2. Fold floor anchor as shown in Figure 21.
- 3. Insert floor anchor (wings first) into hole. Tap anchor flush to floor.
- 4. Insert mounting screws through base and into floor anchors.
- Tighten screws until base is firmly fastened to floor.

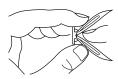


Figure 21 - Folding Anchor

## CONNECTING TO GAS SUPPLY

WARNING: A qualified service person must connect fireplace to gas supply. Follow all local codes.

CAUTION: Never connect fireplace directly to the propane/LP supply. This fireplace requires an external regulator (not supplied). Install the external regulator between the fireplace and propane/LP supply.

The installer must supply an external regulator. The external regulator will reduce incoming gas pressure. You must reduce incoming gas pressure to between 11 and 14 inches of water. If you do not reduce incoming gas pressure, fireplace regulator damage could occur. Install external regulator with the vent pointing down as shown in Figure 22. Pointing the vent down protects it from freezing rain or sleet.

CAUTION: Use only new, black iron or steel pipe. Internally-tinned copper tubing may be used in certain areas. Check your local codes. Use pipe of 1/2" or greater diameter to allow proper gas volume to fireplace. If pipe is too small, undue loss of pressure will occur.

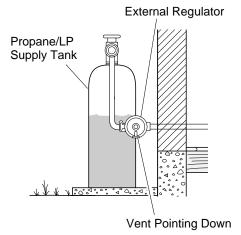


Figure 22 - External Regulator with Vent Pointing Down

Installation must include a manual shutoff valve, union, and plugged 1/8" NPT tap. Locate NPT tap within reach for test gauge hook up. NPT tap must be upstream from fireplace (see Figure 23).

*IMPORTANT:* Install main gas valve (manual shutoff valve) in an accessible location. The main gas valve is for turning on or shutting off the gas to the appliance.

Apply pipe joint sealant lightly to male threads. This will prevent excess sealant from going into pipe. Excess sealant in pipe could result in clogged fireplace valves.

CAUTION: Use pipe joint sealant that is resistant to liquid petroleum (LP) gas.

We recommend that you install a sediment trap in supply line as shown in Figure 23. Locate sediment trap where it is within reach for cleaning. Install in piping system between fuel supply and heater. Locate sediment trap where trapped matter is not likely to freeze. A sediment trap traps moisture and contaminants. This keeps them from going into fireplace controls. If sediment trap is not installed or is installed wrong, fireplace may not run properly.

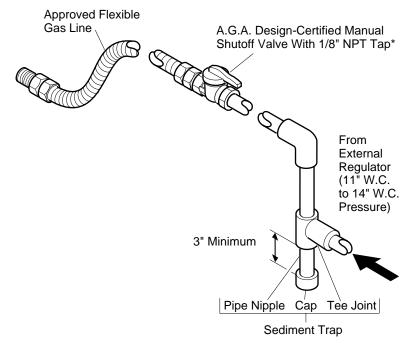


Figure 23 - Gas Connection

<sup>\*</sup> Purchase the optional A.G.A. design-certified manual shutoff valve from your dealer. See *Accessories*, page 27.

#### INSTALLATION

Continued

### CONNECTING FIREPLACE TO GAS SUPPLY

#### Installation Items Needed

- · Phillips screwdriver
- sealant (resistant to propane/LP gas, not provided)
- Remove fireplace screen. Remove two screws that hold fireplace screen in place for shipping. These screws are located near top of screen. Discard screws. Lift fireplace screen up and pull out to remove.
- 2. Remove screws that attach branch support to fireplace (see Figure 24). Carefully lift up branch support and remove from fireplace (see Figure 24).
- Route flexible gas line (provided by installer) from manual shutoff valve into fireplace through side or rear access holes in outer casing. Route flexible gas supply line through fireplace access holes in outer casing.

NOTICE: Most building codes do not permit concealed gas connections. A flexible gas line is provided to allow accessibility from the fireplace (see Figure 24). The flexible gas supply line connection to the manual shutoff valve should be accessible.

- 4. Apply pipe joint sealant lightly to male threads of gas connector attached to flexible gas line (see Figure 25). Connect flexible gas line to flexible gas line attached to gas regulator of fireplace (see Figure 25).
- 5. Check all gas connections for leaks. See *Checking Gas Connections*, page 16.
- 6. Replace branch support back into fireplace. Feed flexible gas line into fireplace base area while replacing branch support. Make sure the entire flexible gas line is in fireplace base area. Reattach branch support to fireplace with screws removed in step 2.

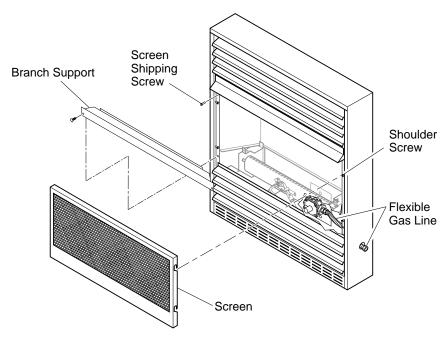


Figure 24 - Removing Branch Support From Fireplace

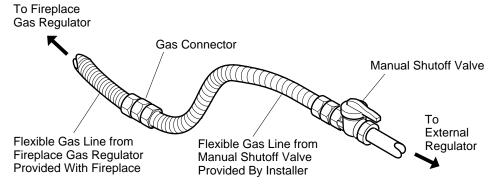


Figure 25 - Attaching Flexible Gas Lines Together

Continued

### **VENT-FREE PROPANE/LP GAS COMPACT FIREPLACE**

#### INSTALLATION

Continued

### CHECKING GAS CONNECTIONS

WARNING: Test all gas piping and connections for leaks after installing or servicing. Correct all leaks at once.

WARNING: Never use an open flame to check for a leak. Apply a mixture of liquid soap and water to all joints. Bubbles forming show a leak. Correct all leaks at once.

CAUTION: Make sure external regulator has been installed between propane/LP supply and fireplace. See guidelines under Connecting To Gas Supply, page 14.

## Pressure Testing Gas Supply Piping System

#### Test Pressures In Excess Of 1/2 PSIG

- Disconnect fireplace and its individual manual shutoff valve from gas supply piping system. Pressures in excess of 1/2 psig will damage fireplace regulator.
- 2. Cap off open end of gas pipe where manual shutoff valve was connected.
- 3. Pressurize supply piping system by either using compressed air or opening propane/LP supply tank valve.
- Check all joints of gas supply piping system. Apply mixture of liquid soap and water to gas joints. Bubbles forming show a leak.
- 5. Correct all leaks at once.
- Reconnect fireplace and manual shutoff valve to gas supply. Check reconnected fittings for leaks.

### Test Pressures Equal To or Less Than 1/2 PSIG

- 1. Close manual shutoff valve (see Figure 26).
- 2. Pressurize supply piping system by either using compressed air or opening propane/LP supply tank valve.
- 3. Check all joints from propane/LP supply tank to manual shutoff valve (see Figure 27). Apply mixture of liquid soap and water to gas joints. Bubbles forming show a leak.
- 4. Correct all leaks at once.

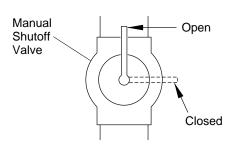


Figure 26 - Manual Shutoff Valve

### Pressure Testing Fireplace Gas Connections

- 1. Open manual shutoff valve (see Figure 26).
- 2. Open propane/LP supply tank valve.
- 3. Make sure control knob of fireplace is in the OFF position.
- 4. Check all joints from manual shutoff valve to thermostat gas valve (see Figure 27). Apply mixture of liquid soap and water to gas joints. Bubbles forming show a leak.
- 5. Correct all leaks at once.
- 6. Light fireplace (see *Operating Fire- place*, pages 17 and 18). Check all other internal joints for leaks.
- 7. Turn off fireplace (see *To Turn Off Gas to Appliance*, page 18).
- 8. Replace front panel.

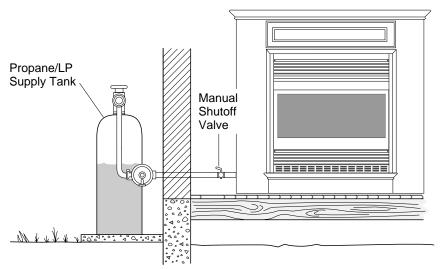


Figure 27 - Checking Gas Joints Shown with Optional Mantel

## OPERATING FIREPLACE



## FOR YOUR SAFETY READ BEFORE LIGHTING

WARNING: If you do not follow these instructions exactly, a fire or explosion may result causing property damage, personal injury or loss of life.

- A. This appliance has a pilot which must be lighted by hand. When lighting the pilot, follow these instructions exactly.
- B. BEFORE LIGHTING smell all around the appliance area for gas. Be sure to smell next to the floor because some gas is heavier than air and will settle on the floor.

### WHAT TO DO IF YOU SMELL GAS

- Do not try to light any appliance.
- Do not touch any electric switch; do not use any phone in your building.
- Immediately call your gas supplier from a neighbor's phone. Follow the gas supplier's instructions.
- If you cannot reach your gas supplier, call the fire department.
- C. Use only your hand to push in or turn the gas control knob. Never use tools. If the knob will not push in or turn by hand, don't try to repair it, call a qualified service technician or gas supplier. Force or attempted repair may result in a fire or explosion.
- D. Do not use this appliance if any part has been under water. Immediately call a qualified service technician to inspect the appliance and to replace any part of the control system and any gas control which has been under water.



### LIGHTING INSTRUCTIONS



WARNING: You must operate this fireplace with the fireplace screen in place. Make sure fireplace screen is installed before running fireplace.

NOTICE: During initial operation of new fireplace, burning logs will give off a paper-burning smell. Open window to vent smell. Operate fireplace on HI position to burn off odor. This will only last a few hours.

- 1. STOP! Read the safety information, column 1.
- 2. Make sure manual shutoff valve is fully open.
- 3. Turn control knob clockwise / to the OFF position.
- 4. Wait five (5) minutes to clear out any gas. Then smell for gas, including near the floor. If you smell gas, STOP! Follow "B" in the safety information. If you don't smell gas, go to the next step.
- 5. Turn control knob counterclockwise to the PILOT position. Press in control knob for five (5) seconds (see Figure 28).

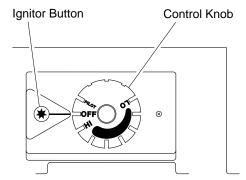


Figure 28 - Control Knob In The OFF Position

**Note:** You may be running this fireplace for the first time after hooking up to gas supply. If so, the control knob may need to be pressed in for 30 seconds. This will allow air to bleed from the gas system.

- If control knob does not pop up when released, contact a qualified service person or gas supplier for repairs.
- 6. With control knob pressed in, push down and release ignitor button. This will light pilot. The pilot is attached to the front of burner. If needed, keep pressing ignitor button until pilot lights.

Note: If pilot does not stay lit, refer to Troubleshooting, pages 20 through 22. Also contact a qualified service person or gas supplier for repairs. Until repairs are made, light pilot with match. To light pilot with match, see Manual Lighting Procedure, page 18.

- 7. Keep control knob pressed in for 30 seconds after lighting pilot. After 30 seconds, release control knob.
  - **Note:** If pilot goes out, repeat steps 3 through 7. This fireplace has a safety interlock system. Wait one (1) minute before lighting pilot again.
- 8. Turn control knob counterclockwise to desired heating level. The main burner should light. Set control knob to any heat level between HI and LO.

A CAUTION: Do not try to adjust heating levels by using the manual shutoff valve.

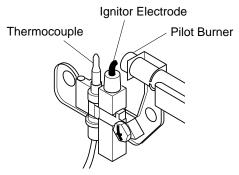


Figure 29 - Pilot (Actual Pilot May Vary From Illustration)

Continued

#### VENT-FREE PROPANE/LP GAS COMPACT FIREPLACE

## OPERATING FIREPLACE

Continued



### TO TURN OFF GAS TO APPLIANCE



#### **Shutting Off Fireplace**

- Turn control knob clockwise / to the OFF position.
- Turn off all electric power to the appliance if service is to be performed.

### Shutting Off Burner Only (pilot stays lit)

Turn control knob clockwise / the PILOT position.



\star to

## THERMOSTAT CONTROL OPERATION

The thermostat used on this fireplace senses the room temperature. At times the room may exceed the set temperature. If so, the burner will shut off. The burner will cycle back on when room temperature drops below the set temperature.

The control knob can be set to any heat level between HI and LO.

Note: The thermostat sensing bulb measures the temperature of air near the fireplace cabinet. This may not always agree with room temperature (depending on housing construction, installation location, room size, open air temperatures, etc.). Frequent use of your fireplace will let you determine your own comfort levels.

### MANUAL LIGHTING PROCEDURE



- 1. Follow steps 1 through 5 under *Lighting Instructions*, page 17.
- 2. With control knob pressed in, strike match. Hold match to pilot until pilot lights.
- 3. Keep control knob pressed in for 30 seconds after lighting pilot. After 30 seconds, release control knob. Now follow step 8, page 17.

#### **OPERATING BLOWER**



This blower has three settings: ON, OFF, and AUTO. In the ON position, the blower will operate constantly. In the OFF position, the blower will not operate. In the AUTO position, the blower will start when the thermostat senses a sufficient increase in firebox temperature.

Note: Your fireplace and thermostat blower will not turn on and off at the same time. The fireplace may run for several minutes before the blower turns on. After the heater modulates to the pilot position, the blower will continue to run. The blower will shut off after the firebox temperature decreases.

**Note:** It is safe to operate fireplace with blower turned off. However, the blower helps distribute heated air from the fireplace.

Auto/Off/On Switch

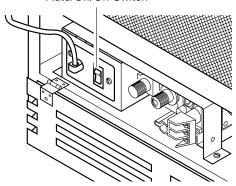


Figure 30 - Auto/Off/On Switch

## INSPECTING BURNER

Check pilot flame pattern and burner flame pattern often.

#### **PILOT FLAME PATTERN**

Figure 31 shows a correct pilot flame pattern. Figure 32 shows an incorrect pilot flame pattern. The incorrect pilot flame is not touching the thermocouple. This will cause the thermocouple to cool. When the thermocouple cools, the fireplace will shut down.

If pilot flame pattern is incorrect, as shown in Figure 32

- turn fireplace off (see *To Turn Off Gas to Appliance*, page 18)
- see *Troubleshooting*, pages 20 through 22

#### Thermocouple

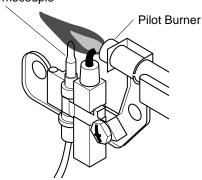


Figure 31 - Correct Pilot Flame Pattern (Actual Pilot May Vary From Illustration)

#### **BURNER FLAME PATTERN**

Figure 33 shows a correct burner flame pattern. Figure 34 shows an incorrect burner flame pattern. The incorrect burner flame pattern shows the flame consistently higher than one inch above the log.

If burner flame pattern is incorrect, as shown in Figure 34

- turn fireplace off (see *To Turn Off Gas to Appliance*, page 18)
- see Troubleshooting, pages 20 through 22

Top of Flame About One Inch Below Logs

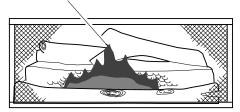


Figure 33 - Correct Burner Flame Pattern

Top of Flame Consistently About One Inch Higher Than Logs

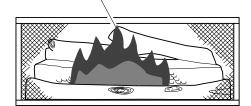


Figure 34 - Incorrect Burner Flame Pattern

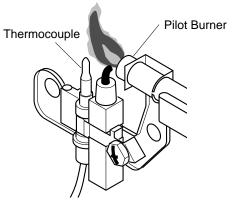


Figure 32 - Incorrect Pilot Flame Pattern (Actual Pilot May Vary From Illustration)

#### VENT-FREE PROPANE/LP GAS COMPACT FIREPLACE

#### **TROUBLESHOOTING**

*Note:* For additional help, visit DESA International's technical service web site at **www.desatech.com**.

*Note*: All troubleshooting items are listed in order of operation.

WARNING: Turn off and unplug fireplace and let cool before servicing. Only a qualified service person should service and repair fireplace.

CAUTION: Never use a wire, needle, or similar object to clean ODS/pilot. This can damage ODS/pilot unit.

OBSERVED PROBLEM	POSSIBLE CAUSE	REMEDY		
When ignitor button is pressed, there is no spark at ODS/pilot	1. Ignitor cable pinched or wet	Free ignitor cable if pinched by any metal or tubing. Keep ignitor cable dry		
spain at ODS/prior	2. Ignitor electrode not connected to ignitor cable	2. Reconnect ignitor cable		
	3. Broken ignitor cable	3. Replace ignitor cable		
	4. Bad piezo ignitor	4. Replace piezo ignitor		
	5. Ignitor electrode broken	5. Replace ignitor		
	6. Ignitor electrode positioned wrong	6. Replace ignitor		
When ignitor button is pressed, there is spark at ODS/pilot but no ignition	Gas supply turned off or manual shutoff valve closed	Turn on gas supply or open manual shutoff valve		
	2. Control knob not in PILOT position	2. Turn control knob to PILOT position		
	3. Control knob not pressed in while in PILOT position	3. Press in control knob while in PILOT position		
	4. Air in gas lines when installed	4. Continue holding down control knob. Repeat igniting operation until air is removed		
	5. Depleted gas supply	5. Contact local propane/LP gas company		
	6. ODS/pilot is clogged	6. Clean ODS/pilot (see <i>Cleaning and Maintenance</i> , page 23) or replace ODS/		
	7.0	pilot assembly		
	7. Gas regulator setting is not correct	7. Replace gas regulator		
ODS/pilot lights but flame goes out when	1. Control knob not fully pressed in	1. Press in control knob fully		
control knob is released	2. Control knob not pressed in long enough	2. After ODS/pilot lights, keep control knob pressed in 30 seconds		
	3. Safety interlock system has been triggered	3. Wait one minute for safety interlock system to reset. Repeat ignition operation		
	4. Manual shutoff valve not fully open	4. Fully open manual shut-off valve		
	5. Thermocouple connection loose at control valve	5. Hand tighten until snug, then tighten 1/4 turn more		
	6. Pilot flame not touching thermocouple, which allows thermocouple to cool,	6. A) Contact local propane/LP gas company		
	causing pilot flame to go out. This problem could be caused by one or both of the following:  A) Low gas pressure  B) Dirty or partially clogged ODS/pilot	B) Clean ODS/pilot (see <i>Cleaning and Maintenance</i> , page 23) or replace ODS/pilot assembly		
	7. Thermocouple damaged	7. Replace thermocouple		
		, . Itopiaco aicililocoupio		

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#### **TROUBLESHOOTING**

#### Continued

POSSIBLE CAUSE	REMEDY		
1. Burner orifice is clogged	1. Clean burner (see <i>Cleaning and Mainte-nance</i> , page 23) or replace burner orifice		
2. Burner orifice diameter is too small	2. Replace burner orifice		
3. Inlet gas pressure is too low	3. Contact local propane/LP gas company		
Manifold pressure is too low	Contact local propane/LP gas company		
2. Burner orifice is clogged	2. Clean burner (see <i>Cleaning and Mainte-nance</i> , page 23) or replace burner orifice		
1. Burner orifice is clogged or damaged	1. Clean burner (see <i>Cleaning and Maintenance</i> , page 23) or replace burner orifice		
2. Burner damaged	2. Replace burner pressure		
3. Low inlet gas pressure	3. Contact local propane/LP gas company		
4. Gas regulator defective	4. Replace gas regulator		
1. Residues from manufacturing processes	Problem will stop after a few hours of operation		
1. Air in gas line	Operate burner until air is removed from line. Have gas line checked by local pro- pane/LP gas company		
2 Air passageways on fireplace blocked	2. Observe minimum installation clearances		
2. The pussageways on Theplace blocked	(see pages 8 through 10)		
3. Dirty or partially clogged burner orifice	3. Clean burner (see <i>Cleaning and Mainte-</i>		
, , , , ,	nance, page 23) or replace burner orifice		
When heated, vapors from furniture polish, wax, carpet cleaners, etc. turn into white powder residue	Turn heater off when using furniture polish, wax, carpet cleaners, or similar products		
	<ol> <li>Burner orifice is clogged</li> <li>Burner orifice diameter is too small</li> <li>Inlet gas pressure is too low</li> <li>Manifold pressure is too low</li> <li>Burner orifice is clogged</li> <li>Burner orifice is clogged or damaged</li> <li>Burner damaged</li> <li>Low inlet gas pressure</li> <li>Gas regulator defective</li> <li>Residues from manufacturing processes</li> <li>Air in gas line</li> <li>Air passageways on fireplace blocked</li> <li>Dirty or partially clogged burner orifice</li> <li>When heated, vapors from furniture polish, wax, carpet cleaners, etc. turn into</li> </ol>		

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# VANGUARD. VMH10TPA VENT-FREE PROPANE/LP GAS COMPACT FIREPLACE

#### **TROUBLESHOOTING**

Continued

**WARNING:** If you smell gas

- Shut off gas supply.
- · Do not try to light any appliance.
- Do not touch any electrical switch; do not use any phone in your building.
- Immediately call your gas supplier from a neighbor's phone. Follow the gas supplier's instructions.
- If you cannot reach your gas supplier, call the fire department.

*IMPORTANT:* Operating fireplace where impurities in air exist may create odors. Cleaning supplies, paint, paint remover, cigarette smoke, cements and glues, new carpet or textiles, etc., create fumes. These fumes may mix with combustion air and create odors.

OBSERVED PROBLEM	POSSIBLE CAUSE	REMEDY		
Fireplace produces a clicking/ticking noise just after burner is lit or shut off	Metal expanding while heating or contracting while cooling	This is common with most fireplaces. If noise is excessive, contact qualified service person		
Fireplace produces unwanted odors	<ol> <li>Fireplace burning vapors from paint, hair spray, glues, etc. (See <i>IMPORTANT</i> statement above)</li> <li>Low fuel supply</li> <li>Gas leak. See Warning statement at top of page</li> </ol>	<ol> <li>Ventilate room. Stop using odor causing products while fireplace is running</li> <li>Refill supply tank</li> <li>Locate and correct all leaks (see <i>Checking Gas Connections</i>, page 16)</li> </ol>		
Fireplace shuts off in use (ODS operates)	<ol> <li>Not enough fresh air is available</li> <li>Low line pressure</li> <li>ODS/pilot is partially clogged</li> </ol>	<ol> <li>Open window and/or door for ventilation</li> <li>Contact local propane/LP gas company</li> <li>Clean ODS/pilot (see <i>Cleaning and Maintenance</i>, page 23)</li> </ol>		
Gas odor even when control knob is in OFF position	<ol> <li>Gas leak. See Warning statement at top of page</li> <li>Control valve defective</li> </ol>	<ol> <li>Locate and correct all leaks (see <i>Checking Gas Connections</i>, page 16)</li> <li>Replace control valve</li> </ol>		
Gas odor during combustion	<ol> <li>Foreign matter between control valve and burner</li> <li>Gas leak. See Warning statement at top of page</li> </ol>	<ol> <li>Take apart gas tubing and remove foreign matter</li> <li>Locate and correct all leaks (see <i>Checking Gas Connections</i>, page 16)</li> </ol>		
Moisture/condensation noticed on windows	1. Not enough combustion/ventilation air	1. Refer to Air for Combustion and Ventilation requirements (page 5)		

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## CLEANING AND MAINTENANCE

WARNING: Turn off fireplace and let cool before cleaning.

CAUTION: You must keep control areas, burner, and circulating air passageways of fireplace clean. Inspect these areas of fireplace before each use. Have fireplace inspected yearly by a qualified service person. Fireplace may need more frequent cleaning due to excessive lint from carpeting, bedding material, pet hair, etc.

## CLEANING BURNER INJECTOR HOLDER AND PILOT AIR INLET HOLE

The primary air inlet holes allow the proper amount of air to mix with the gas. This provides a clean burning flame. Keep these holes clear of dust, dirt, and lint. Clean these air inlet holes prior to each heating season. Blocked air holes will create soot. We recommend that you clean the unit every 2,500 hours of operation or every three months.

We also recommend that you keep the burner tube and pilot assembly clean and free of dust and dirt. To clean these parts we recommend using compressed air no greater than 30 PSI. Your local computer store, hardware store, or home center may carry compressed air in a can. You can use a vacuum cleaner in the blow position. If using compressed air in a can, please follow the directions on the can. If you don't follow directions on the can, you could damage the pilot assembly.

- Shut off the unit, including the pilot.
   Allow the unit to cool for at least thirty minutes.
- 2. Inspect burner, pilot, and primary air inlet holes on injector holder for dust and dirt (see Figure 35).
- 3. Blow air through the ports/slots and holes in the burner.

- 4. Check the injector holder located at the end of the burner tube again. Remove any large particles of dust, dirt, lint, or pet hairs with a soft cloth or vacuum cleaner nozzle.
- 5. Blow air into the primary air holes on the injector holder.
- 6. In case any large clumps of dust have now been pushed into the burner repeat steps 3 and 4.

Clean the pilot assembly also. A yellow tip on the pilot flame indicates dust and dirt in the pilot assembly. There is a small pilot air inlet hole about two inches from where the pilot flame comes out of the pilot assembly (see Figure 36). With the unit off, lightly blow air through the air inlet hole. You may blow through a drinking straw if compressed air is not available.

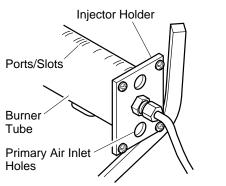


Figure 35 - Injector Holder On Outlet Burner Tube

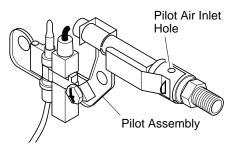


Figure 36 - Pilot Inlet Air Hole

#### **CABINET**

#### Air Passageways

• Use a vacuum cleaner or pressurized air to clean.

#### **Exterior**

 Use a soft cloth dampened with a mild soap and water mixture. Wipe the cabinet to remove dust.

#### SERVICE HINTS

#### When Gas Pressure Is Too Low

- pilot will not stay lit
- burner will have delayed ignition
- fireplace will not produce specified heat
- propane/LP gas supply may be low

#### When Gas Quality Is Bad

- pilot will not stay lit
- burner will produce flames and soot
- fireplace will backfire when lit

You may feel your gas pressure is too low or gas quality is bad. If so, contact your local propane/LP gas supplier.

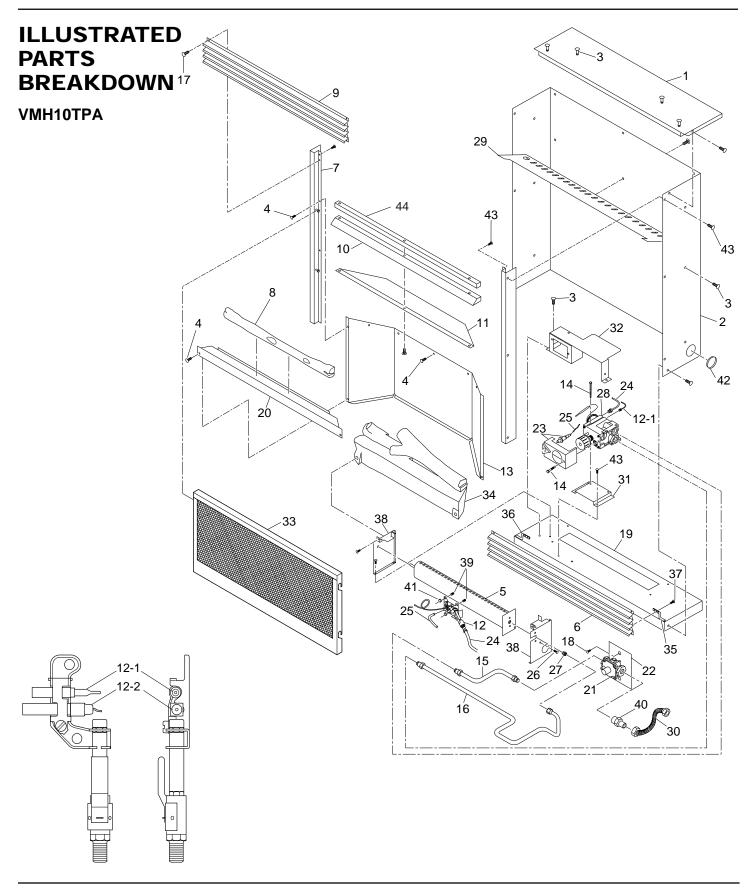
## TECHNICAL SERVICE

You may have further questions about installation, operation, or troubleshooting.

If so, contact DESA International's Technical Service Department at 1-800-323-5190.

You can also visit DESA International's technical services web site at www.desatech.com.

### **VENT-FREE PROPANE/LP GAS COMPACT FIREPLACE**



#### **PARTS LIST**

#### VMH10TPA

This list contains replaceable parts used in your fireplace. When ordering parts, follow the instructions listed under *Replacement Parts* on page 26 of this manual.

KEY         VMH10TPA           NO.         PART NO.         DESCRIPTION           1         102633-02CK         Outer Casing Top           2         102624-02         Outer Casing           3         099230-02         Shoulder Screw           4         098304-01         Screw, #10 x 3/8"	QTY.  1 1 14 12 1
1 102633-02CK Outer Casing Top 2 102624-02 Outer Casing 3 099230-02 Shoulder Screw	1 1 14 12
2 102624-02 Outer Casing Shoulder Screw	1 14 12
3 099230-02 Shoulder Screw	14 12
	12
	1 1 1
5 103591-02 Burner	1 4 1
6 103209-03 Louvered Door	1 1
7 102635-02CK Left and Right Side Front	2
8 104058-01 Branch	1 1
9 103209-01 Brass Top Louver	1 1
10 101712-04 Firebox Hood	1 1
11 102638-01 Firebox Top	1 1
12 099059-02 ODS/Pilot Assembly	1 1
12-1 098514-01 Thermocouple	1 1
12-2 098594-01 Ignitor Electrode	1 1
13 102460-01CJ Firebox Wrapper	1
14 099211-01 Control Bracket Screw	2
15 103963-01 Inlet Tube	1
16   103671-01   Burner Tube	1
17   100587-01   Brass Screw, #6 x 3/8	4
18 098303-02 Regulator Screw	2
19 104335-01CK Outer Shell Base	1
20 102649-02CJ Branch Support	1
21 099415-04 Gas Regulator	1
22 102875-01 Regulator Bracket	1
23 101381-01 Valve Cover and Piezo	1
24 099387-03 Pilot Tube	1
25 098271-06 Ignitor Cable	1
26 M11084-38 Screw #8 x 3/8"	1
27   101004-13   Injector	1
28 098522-15 Gas Valve	1
29   102639-01   Baffle	1
30 101628-01 Flexible Connector	1
31 102869-01 Control Bracket	1
32   102731-01   Control Shield	1
33 103295-01CJ Screen Assembly	1
34   104078-01   Main Log	1
35   104313-01   Pin Hinge (Right)	1
36 104313-02 Pin Hinge (Left)	1
37 M10908-2 Hinge Screws	4
38 103734-01 Burner Support	2
39   101006-01   Pilot Bracket	1
40 097809-03 3/8 NPT x 3/8" Flare Brass Fitting	1
41 098249-01 Nut, M5	2
42 101629-02 Bushing	1
43 M11084-26 Hex Head Screw, #10 x 3/8"	31
44 102458-01CK Middle Rail	
PARTS AVAILABLE — NOT SHOWN	
104319-02 Instructional Video	1
101054-01 Lighting Instructions Plate	1
100563-01 Warning Plate	1
103470-01 Hardware Package	1

# VANGUARD. VMH10TPA VENT-FREE PROPANE/LP GAS COMPACT FIREPLACE

#### **SPECIFICATIONS**

Input Rate Type Gas Ignition

Pressure Regulator Setting
Inlet Gas Pressure (in. of water)\*

Maximum Minimum

Dimensions, Inches (H x W x D)

Fireplace (including hood and screws)

Carton
Weight, pounds
Fireplace
Shipping

\* For purposes of input adjustment

10,000 Btu/Hr Propane/LP Only Piezo

8.5" W.C.

14" 11"

 $25^{7/8} \times 26^{13/16} \times 9^{3/8}$  $32^{5/8} \times 27^{3/16} \times 11^{5/8}$ 

44 <sup>1</sup>/<sub>2</sub> lbs. 48 lbs.

## REPLACEMENT PARTS

*Note:* Use only original replacement parts. This will protect your warranty coverage for parts replaced under warranty.

#### PARTS UNDER WARRANTY

Contact authorized dealers of this product. If they can't supply original replacement part(s) call DESA International's Technical Service Department at 1-800-323-5190 for referral information.

When calling DESA International, have ready

- your name
- your address
- · model and serial numbers of your fireplace
- how fireplace was malfunctioning
- type of gas used (propane/LP or natural gas)
- · purchase date

Usually, we will ask you to return the defective part to the factory.

### PARTS NOT UNDER WARRANTY

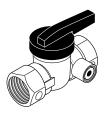
Contact authorized dealers of this product. If they can't supply original replacement part(s) call DESA International's Parts Department at 1-800-972-7879 for referral information.

When calling DESA International, have ready

- · model number of your fireplace
- the replacement part number

#### **ACCESSORIES**

Purchase these fireplace accessories from your local dealer. If they cannot supply these accessories call DESA International's Sales Department at 1-800-458-2472 for referral information. You can also write to the address listed on the back page of this manual.



## MANUAL SHUTOFF VALVE GA5010

Manual shutoff valve with 1/8" NPT tap.

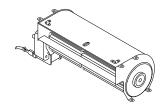


#### **BRASS TRIM KIT - GA6095**

Optional four-sided brass trim kit for recessed built-in installations (when unit is raised off of the floor. Provides a finished appearance by covering rough edges of wall opening.

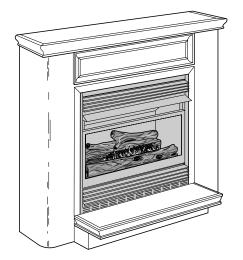
#### **BRASS TRIM KIT - GA6094**

Optional three-sided brass trim kit for custom and recessed installations (when unit is on the floor). Provides a finished appearance by covering rough edges of wall opening. Included with all mantels.



#### THERMOSTATICALLY -CONTROLLED BLOWER KIT GA3400T

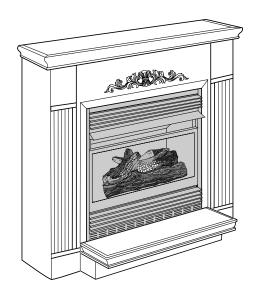
Provides better heat distribution. Makes fireplace more efficient. Automatically turns off and on as needed.



# CABINET MANTEL WITH BUILT-IN HEARTH BASE AND ROUNDED LEG STYLING Unfinished - GM92411

Unfinished - GM921U Finished - GM920F

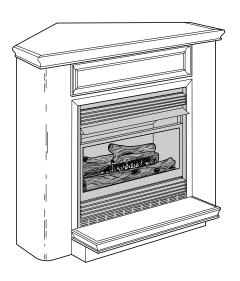
For use with fireplace. A hardwood mantel and hearth base offers compact styling and completes the fireplace look. Available in a walnut finished or an unfinished hardwood, ready to stain or paint. Complete assembly instructions included. Three-sided brass trim kit included.



#### CABINET MANTEL WITH BUILT-IN HEARTH BASE AND TRADITIONAL SQUARE LEG STYLING

Unfinished - GM923U Finished - GM922F

For use with fireplace. A hardwood mantel and hearth base offers compact styling and completes the fireplace look. Available in a stained or an unfinished (ready to stain or paint) Oak Veneer over hardwood. Complete assembly instructions included. Three-sided brass trim kit included.



#### CORNER MANTEL WITH BUILT-IN HEARTH BASE Unfinished - GM721U Finished - GM720F

For use with fireplace. Space-saving mantel and hearth base corner design features clean, classic lines. Available in a walnut finish or an unfinished hardwood, ready to stain or paint. Complete assembly instructions included. Three-sided brass trim kit included.

#### WARRANTY INFORMATION

#### **KEEP THIS WARRANTY**

Model		
Serial No		
Date Purchased _		

Always specify model and serial numbers when communicating with the factory.

We reserve the right to amend these specifications at any time without notice. The only warranty applicable is our standard written warranty. We make no other warranty, expressed or implied.

#### **LIMITED WARRANTY VENT-FREE PROPANE/LP GAS COMPACT CLASSIC HEARTH® FIREPLACE**

DESA International warrants this product to be free from defects in materials and components for four (4) years and five (5) years on stainless steel burners from the date of first purchase, provided that the product has been properly installed, operated and maintained in accordance with all applicable instructions. To make a claim under this warranty the Bill of Sale or cancelled check must be presented.

This warranty is extended only to the original retail purchaser. This warranty covers the cost of part(s) required to restore this fireplace to proper operating condition and an allowance for labor when provided by a DESA Authorized Service Center. Warranty part(s) MUST be obtained through authorized dealers of this product and/or DESA International who will provide original factory replacement parts. Failure to use original factory replacement parts voids this warranty. The fireplace MUST be installed by a qualified installer in accordance with all local codes and instructions furnished with the unit.

This warranty does not apply to parts that are not in original condition because of normal wear and tear, or parts that fail or become damaged as a result of misuse, accidents, lack of proper maintenance or defects caused by improper installation. Travel, diagnostic cost, labor, transportation and any and all such other costs related to repairing a defective fireplace will be the responsibility of the owner.

TO THE FULL EXTENT ALLOWED BY THE LAW OF THE JURISDICTION THAT GOVERNS THE SALE OF THE PRODUCT; THIS EXPRESS WARRANTY EXCLUDES ANY AND ALL OTHER EXPRESSED WARRANTIES AND LIMITS THE DURATION OF ANY AND ALL IMPLIED WARRANTIES, INCLUDING WARRANTIES OF MERCHANTA-BILITY AND FITNESS FOR A PARTICULAR PURPOSE TO FOUR (4) YEARS ON ALL COMPONENTS AND FIVE (5) YEARS ON STAINLESS STEEL BURNERS FROM THE DATE OF FIRST PURCHASE; AND DESA INTERNATIONAL'S LIABILITY IS HEREBY LIMITED TO THE PURCHASE PRICE OF THE PRODUCT AND DESA INTERNATIONAL SHALL NOT BE LIABLE FOR ANY OTHER DAMAGES WHATSOEVER INCLUDING INDIRECT. INCIDENTAL OR CONSEQUENTIAL DAMAGES.

Some states do not allow a limitation on how long an implied warranty lasts or an exclusion or limitation of incidental or consequential damages, so the above limitation on implied warranties, or exclusion or limitation on damages may not apply to you.

This warranty gives you specific legal rights, and you may also have other rights that vary from state to state.

For information about this warranty write:

INTERNATIONAL 2701 Industrial Drive

P.O. Box 90004 Bowling Green, KY 42102-9004

www.desatech.com



NOT A UPC

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